## **EAST Search History**

## EAST Search History (Prior Art)

Ref#	Hits			Default Operator	Plurals	Time Stamp
S1	221	257/666,667,672,673,675,787.ccls. and (semiconductor with (encapsul\$4 or mold \$3) and land and lead adj frame)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 12:59
S2	0	"60594859".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 12:59
S3	6	("5969426"   "6215179"   "6247229"   "6278177"   "6294830"   "6309909").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/01 13:41
S4	8	("5285352"   "5355283"   "5371404"   "5394009"   "5450283"   "5461197"   "5554887"   "5619070").PN.	US-PGPUB; OR USPAT; USOCR		ON	2007/08/01 13:54
S5	237	"257".clas. and ((plurality near3 (ball or sphere or bump) with seal\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 15:17
S6	0	"9990083"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 16:35
S7	0	("9990083").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 16:35
S8	0	"9990083".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 16:35
S9	0	"09990083".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 16:37

S10	0	(method adj2 apparatus adj2 leadframe adj based adj grid adj array adj ic adj packaging).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 16:38
S11	1	(method adj2 apparatus adj2 lead-frame adj based adj grid adj array adj ic adj packaging).ti.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 16:51
S12	2	("20020168796").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 17:10
S13	2	"6670222".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	GPUB; OR AT; CR; FPRS; JPO; WENT;		2007/08/01 17:26
S14	0	("jp2004-71898").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 17:26
S15	0	("jp200471898").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 17:26
S16	0	jp200471898.pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 17:27
S17	0	"200471898".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 17:27
S18	0	("2004-71898.pn.").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 17:27
S19	0	jp2004-71898.pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 17:29

			S. 12 = 5 = : :			
S20	2	("20020168796").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/08/01 18:54
S21	2	"5969426".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 18:56
S22	0	"257".clas. and (heat adj sink) and (passive adj device) and (thickness with chip adj attach\$4 adj site)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 18:58
S23	0	"257".clas. and (thickness with chip adj attach\$4 adj site)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 18:58
S24	86	"257".clas. and (thickness with chip adj attach\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 19:00
S25	1	"257".clas. and (distance with semiconductor near3 (routing adj circuit))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 19:02
S26	1	distance with semiconductor near3 (routing adj circuit)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/01 19:03
S27	2	"6185240".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/02 16:43
S28	2	"4365226".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/02 16:43
S29	6096	(single or whole or one) near10 (leadframe or lead-frame or lead adj frame) near10 (rout\$3 or circuit\$2 or connect\$3 or interconnect\$3 or contact)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:07

S30	87	(single or whole or one) near10 (leadframe or lead-frame or lead adj frame) near10 (rout\$3 or circuit\$2 or connect\$3 or interconnect\$3 or contact) near10 (heat adj sink)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:09
S31	7	(single or whole) near10 (leadframe or lead-frame or lead adj frame) near10 (rout \$3 or circuit\$2 or connect\$3 or interconnect \$3 or contact) near10 (heat adj sink)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:10
S32	610	(leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (rout \$3 or circuit\$2 or connect\$3 or interconnect \$3 or contact) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (heat adj sink) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near7 (chip or die or sensor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:13
S33	294	(leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (rout \$3 or circuit\$2 or connect\$3 or interconnect \$3 or contact) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (heat adj sink) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near7 (chip or die or sensor) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:16
S34	54759	((leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (rout\$3 or circuit\$2 or connect\$3 or interconnect\$3 or contact) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near5 (heat adj sink) and (leadframe or lead-frame or lead adj frame or conductive near2 substrate) near7 (chip or die or sensor) or (leadframe or lead-frame or lead adj frame or conductive near2 substrate with heat adj sink with (monolithic or mono-lithic or mono adj lithic)))and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:18
S35	54754	(leadframe or lead-frame or lead adj frame or conductive near2 substrate with heat adj sink with (monolithic or mono-lithic or mono adj lithic) with routing adj circuit\$2) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:19
S36	0	((leadframe or lead-frame or lead adj frame or conductive near2 substrate) with heat adj sink with (monolithic or mono- lithic or mono adj lithic) with routing adj circuit\$2) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:30

S37	0	((leadframe or lead-frame or lead adj frame or conductive near2 substrate) with heat adj sink with routing adj circuit\$2) and @py< "2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:30
S38	3	((leadframe or lead-frame or lead adj frame or conductive near2 substrate) with routing adj circuit\$2) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 12:32
S39	421	((etch\$3) near8 (connect\$3 or routing adj circuit\$2) near5 (die or chip)) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:27
S40	66	((etch\$3) near8 (connect\$3 or routing adj circuit\$2) near5 (die or chip) and (heat or thermal) near5 conduct\$3) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:29
S41	164	heat adj sink near5 (single or monolithic \$4) near7 (conduct\$3 or metal) and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:33
S42	44	heat adj sink near7 substrate near5 etch\$3 and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:53
S43	O	heat adj sink near7 leadframe near5 etch \$3 and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:53
S44	O	heat adj sink near7 lead-frame near5 etch \$3 and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:53
S45	0	heat adj sink near7 lead adj frame near5 etch\$3 and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:53
S46	1	heat adj sink near10 lead adj frame near10 etch\$3 and @py<"2003"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:55

S47	1	heat adj sink near10 lead adj frame near10 etch\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:55
S48	1	((thermal or heat) near3 conduct\$3) near10 lead adj frame near10 etch\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:56
<b>S</b> 49	371	((thermal or heat) near3 conduct\$3) near10 lead adj frame	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:56
S50	249	((thermal or heat) near3 conduct\$3) near5 lead adj frame	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:57
S51	0	((thermal or heat) near3 conduct\$3) near5 lead adj frame with land	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:57
S52	44	((thermal or heat) near3 conduct\$3) near5 lead adj frame with bond\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/15 13:57
S53	2	"6664615".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/02 15:35
S54	31	(islam-shafidul or santos-romarico or subagio-anang).in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/02 15:59
S55	2195	257/676, e23. ccls. and @ad< "20030625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/02 16:19
S56	1986	257/676,e23.ccls. and @ad<"20020625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/02 16:19

S57	1219	257/676,e23.ccls. and @ad< "20020625"	US-PGPUB; USPAT	OR	ON	2008/09/02 16:19
S58	20	0 ("4231987"   "4825284"   "4915608"   US-PGPUB; "5074779"   "5222014"   "5291062"   USPAT; USOCR "5311402"   "5375989"   "5450283"   "5635671"   "5801440"   "5818698"   "6150193"   "6208525"   "6214645"   "6246015"   "6437432"   "6458629"   "6469258"   "6473311").PN.		OR	ON	2008/09/02 17:44
S59	2	"20020105077"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 17:50
360	1	"20020168796"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 19:09
S61	23182	flip adj chip and (advantage or benefit)	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 19:54
S62	1948	flip adj chip with (advantage or benefit)	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 19:54
S63	807	flip adj chip with (advantage or benefit) and @ad<"20020623"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/02 19:54
S64	2	10/561381	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 17:46
S65	0	257/e23.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 17:56
366	280	257/e23.001.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 17:56
S67	11	257/e23.001.ccls. and @ad<"20030625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 18:01
S68	12825	257/666-668,672,673,676,687,690-693,734,e23.066,e23.116,e23.141e23.01.ccls. and @ad< "20030625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 18:03
569	397	257/666-668,672,673,676,687,690- 693,734,e23.066,e23.116,e23.141e23.01. ccls. and @ad<"20030625" and (molding or resin or encapsula\$4) and (input or "I/ O") near2 pad	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/19 18:05
S70	4	("5608262"   "6084297"   "6166435"   "6294839").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/19 18:34

S71	6603	257/778,E23.037,E23.039,E23.061, E23.066,E23.067.ccls. and @ad<"20030625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:36
S72	4432	257/778,E23.037,E23.039,E23.061, E23.067.ccls. and @ad<"20030625" and (molding or resin or encapsula\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:38
S73	350	257/778,E23.037,E23.039,E23.061, E23.067.ccls. and @ad<"20030625" and (molding or resin or encapsula\$4) and routing	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:39
S74	397	257/666-668,672,673,676,687,690-693,734,e23.066,e23.116,e23.141e23.01. ccls. and @ad<"20030625" and (molding or resin or encapsula\$4) and (input or "I/O") near2 pad	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:40
S75	330	S73 not S74	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:40
S76	316	S75 and pad	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 14:42
S77	480	257/E23.066.ccls. and @ad<"20030625"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 15:57
S78	479	S77 not S76	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 15:57
S79	317	S78 and (molding or resin or encapsula\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 15:57
S80	295	S79 not S74	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/10/22 15:58

## EAST Search History (Interference)

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S81	О	((lead adj frame or leadframe) and substrate and (planar or flat) near (surface or face or side) and (molding or resin or encapsula\$4) and routing near circuit and (chip or IC) and pad).clm.	US-PGPUB	OR	ON	2009/10/22 16:42
S82	5	((lead adj frame or leadframe) and substrate and (planar or flat) near (surface or face or side) and (molding or resin or encapsula\$4) and (chip or IC) and pad). clm.	US-PGPUB	OR	ON	2009/10/22 16:42

10/23/2009 1:02:14 PM

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